

## **REMARKS**

Further and favorable reconsideration is respectfully requested in view of the foregoing amendment and following remarks.

### **Claim Amendments**

Claim 1 has been amended to recite that the main chain of the polyether binary copolymer consists of repeating units of formula (i) and crosslinking units of formula (ii). Support for this amendment is found in the Polymerization Example 1 of Applicants' specification. Editorial changes have been made to claims 1-3.

No new matter has been added to the application by these amendments.

### **Patentability Arguments**

The patentability of the present invention over the disclosure of the reference relied upon by the Examiner in rejecting the claims will be apparent upon consideration of the following remarks.

### **Rejection Under 35 U.S.C. § 102(b)**

The rejection of claim 1 [and dependent claims 2-8] under 35 U.S.C. § 102(b) as being anticipated by Miura et al. (U.S. Patent No. 6,159,389) is respectfully traversed.

[It is noted that the statement of the rejection only includes claim 1. However, claims 2-8 are discussed on page 3 of the Office Action.]

### **The Position of the Examiner**

The Examiner takes the position that Miura et al. disclose a polyether copolymer and crosslinked solid polymer electrolyte wherein, the copolymer of Miura et al. has a repeating unit of formula (I) and a repeating unit of formula (II). The Examiner asserts that formula (I) of the reference reads on Applicants' formula (ii), and that formula (II) of the reference reads on Applicants' formula (i).

### Applicants' Arguments

Applicants respectfully traverse the rejection for the following reasons.

In the polyether copolymer, Miura et al. use epichlorohydrin. On the contrary, Applicants' claims have been amended to recite "a polyether binary copolymer which has a main chain consisting of repeating units of formula (i) and crosslinking units of formula (ii)...". MPEP 2111.03 states, "The transitional phrase 'consisting of' excludes any element, step, or ingredient not specified in the claim. *In re Gray*, 53 F.2d 520, 11 USPQ 255 (CCPA 1931); *Ex parte Davis*, 80 USPQ 448, 450 (Bd. App. 1948) ('consisting of' defined as 'closing the claim to the inclusion of materials other than those recited except for impurities ordinarily associated therewith.')." Thus, Applicants' recited polyether binary copolymer excludes epichlorohydrin.

The omission of epichlorohydrin is not described in Miura et al., since epichlorohydrin is an essential monomer in the reference. Thus, Miura et al. fail to teach each and every limitation of Applicants' claims, as is required for anticipation.

Further, Applicants provide the following additional arguments which demonstrate the unobviousness of the claims over the cited reference.

Miura et al. use a halogen-containing polymer, wherein halogen (chlorine) is derived from epichlorohydrin. As stated above, the polymer recited in Applicants' claims is not a halogen-containing polymer. The structure of the polymers of Applicants' claims and the Miura et al. reference are quite different. Additionally, the polymer electrolyte composition of Applicants' claims has remarkably higher ionic conductivity compared to that of Miura et al. Accordingly, the subject matter of Applicants' claims is unobvious over the teachings of Miura et al.

For the reasons set forth above, it is respectfully requested that the rejection be withdrawn.

### Conclusion

Therefore, in view of the foregoing amendment and remarks, it is submitted that the ground of rejection set forth by the Examiner has been overcome, and that the application is in condition for allowance. Such allowance is solicited.

If, after reviewing this Amendment, the Examiner feels there are any issues remaining which must be resolved before the application can be passed to issue, the Examiner is respectfully requested to contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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